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ABSTRACT

Research identifying strategies and factors that facilitate or inhibit interagency collaboration helped the Maryland State Department of Education (MSDE) and Research for Better Schools (RBS) discover whether they could work together. In a one-year experimental project, MSDE and RBS staff attempted three tasks: identification of common priorities, implementation of pilot activities based on these priorities, and development of long-range plans. Anticipated barriers to collaboration involved resources, external and internal pressures, and motivation and support. Using strategies derived from research findings, the two agencies overcame the barriers and completed the tasks. Successful strategies included task restructuring, flexible planning, control sharing, teaming, participation of staff from all levels, tapping of individual motivation, and ongoing communication both within and between agencies. A model of interagency collaboration based on the project highlights the interaction of six dimensions, including tasks, resources, interdependence, multidirectional communication, goals, and commitment. (Author/RW)

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COLLABORATIVE PLANNING BETWEEN AN R&D AGENCY AND A STATE EDUCATION AGENCY: A CASE HISTORY

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Paper presented at the annual meeting of the American Educational Research Association, Los Angeles, April 1981

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Abstract

The paper describes strategies used in intraorganization coordination and interorganization collaboration during the Maryland Exploration Project, a one-year effort to determine whether or not the state should become a full member of the region served by Research for Better Schools. Three areas of project activity are described in this paper: comparative analysis of priority programs, pilot activities, and long-term planning. Emphasis is placed on the purposeful use of strategies inferred from the literature to facilitate interagency collaboration.

Anticipated barriers related to resources, external and internal pressures, and motivation and support. Successful strategies included: task restructuring, flexible planning, sharing control, teaming, participation of staff of all levels, tapping individual motivation, and using new mechanisms and patterns of communication.

A preliminary model of collaboration derived from project activities suggest the key dimensions of: tasks, resources, goals, commitment, interdependence, and multi-directional communication.

Introduction

The purpose of this paper is to describe strategies used to facilitate intraorganization coordination and interorganization collaboration. The strategies were applied by staff of an educational research and development (R&D) laboratory and a state education agency who worked together on a one-year project. In designing and implementing the project, a purposeful attempt was made to use strategies and techniques suggested by studies of educational change and by the literature on organizational development. It was argued that anticipated barriers could be overcome, and intended outcomes enhanced if facilitating strategies recommended or implied by research were put into practice.

Processes, strategies, and techniques are described in the context of three activity areas: comparative analysis of priority programs, pilot activities, and long-term planning. Using a case history approach, the paper presents background information about each activity area, describes strategies used, barriers encountered, intended and unanticipated outcomes, and process learnings. The final section of the paper suggests a preliminary model for interagency collaboration based on project experiences.

Project Overview

Research for Better Schools (RBS), an educational R&D laboratory, is funded by the National Institute of Education (NIE) to serve educators in the tri-state region of Delaware, Pennsylvania, and New Jersey. In addition, one RBS division -- the Regional Exchange -- serves the state of Maryland. In 1978, the Congressional Panel Review Team recommended that

NIE, RBS, and Maryland explore the feasibility and desirability of that state becoming a full member of the region served by RBS. To that end, a one-year "Exploration Project" was carried out, beginning December 1, 1979.

The purpose of the project was to determine whether it was to the mutual advantage of RBS and Maryland to work together, and, if so, what long-term activities should be planned: Areas of activity included: 1) governance (redesign of the RBS Board of Directors in order to accomodate a fourth state); 2) involvement of key interest groups (participation of professional associations, institutes of higher education, and state and local administrators); 3) coordination and monitoring of project activities and outcomes (by a joint management team); 4) interaction with NIE (including reports and documentation); 5) comparative analysis of needs and interests; 6) pilot activities; and 7) long-term planning. This paper deals only with the last three areas, since they were the ones in which most attention was given to strategies of effective collaboration.

Comparative Analysis of Priority Programs

If pilot activities and long-term plans were to be relevant to RBS and the state, both organizations needed to understand the other's priorities, capabilities, and interests, and the relationships between the two sets of information.

Alternative methods of data collection considered included: 1) survey by mailed questionnaire of the 24 local education agencies (LEAs) in the state, each division of the state education agency (SEA), and RBS program directors; 2) statewide "conference" of program presentations; 3) analysis

of existing documents; 4) a Delphi to be completed by selected respondents in both organizations; and 5) interviews using a structured framework, conducted with RBS program directors and staff and with SEA program directors.

While it was important to include (or at least provide opportunity for inclusion) all major work efforts or priorities, resource constraints did not permit extensive surveys. Also, any document describing priorities had to be clear and concise: the "audience" consisted of senior administrators with little time to read. The task appeared to be: to describe and analyze RBS and Maryland major school improvement efforts (or priority programs) accurately, concisely, and in such a way that relationships could be readily determined.

It was decided that the last alternative -- of using structured interviews with RBS and SEA program directors -- was most cost-effective.

Perspectives

Five perspectives served as criteria in the design of comparative analysis activities:

- Programs described could be underway in 1980, but should be projected to continue in 1981 and 1982.
- Programs should be related to school improvement
- The framework used should include dimensions found to be important in school improvement, which could be applied equally well to RBS efforts as to state programs.
- The development of program descriptions (interview and written narrative) should be relatively simple, requiring no more than one person day per program description.
- Staff of both RBS and the Maryland State Department of Education (MSDE) should be involved in framework design and "pilot testing."

Strategic Activities

The five-person RBS/MSDE task force agreed on the task definition and perspectives, and a series of activities were carried out.

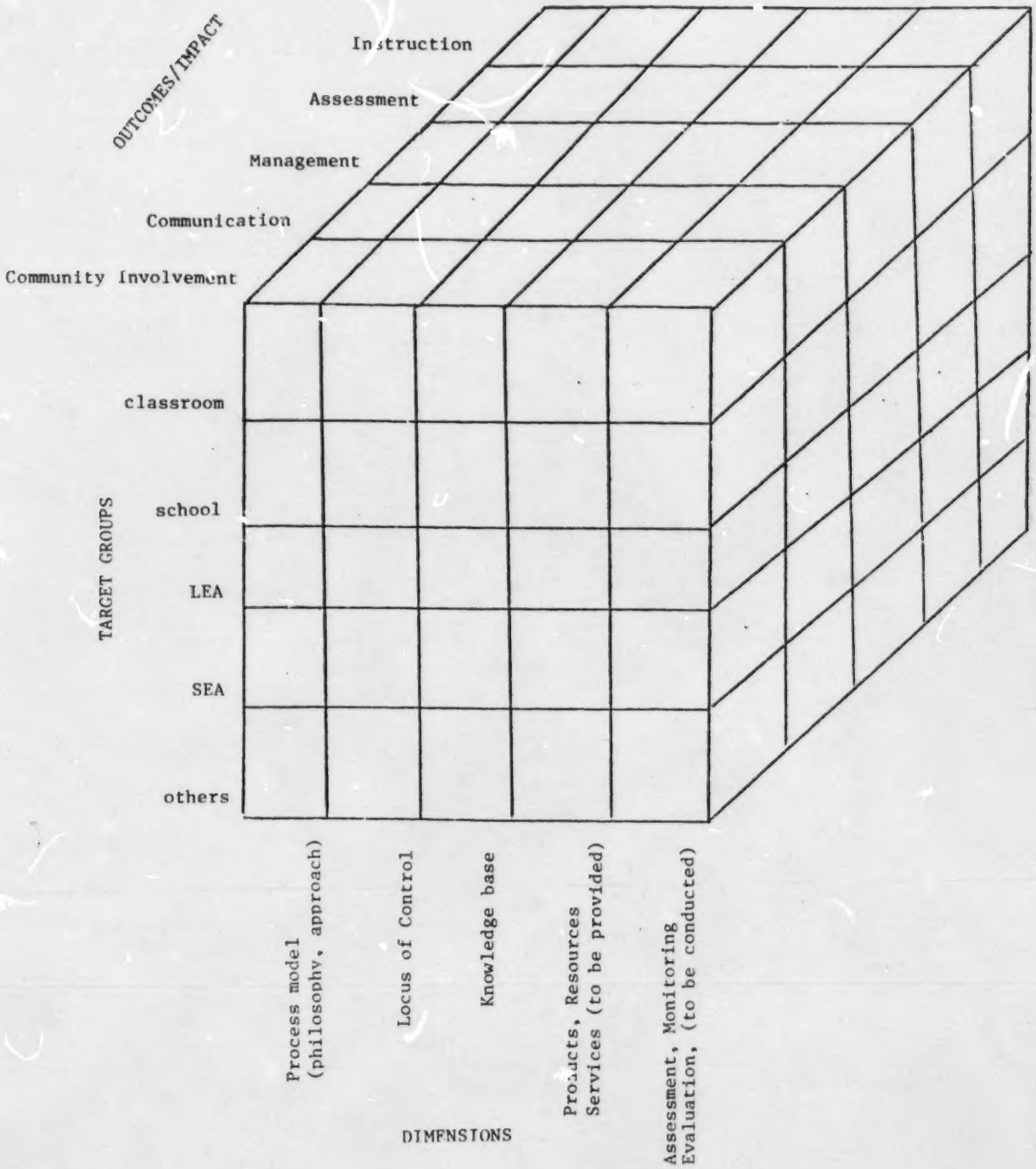
Two RBS staff (familiar with Maryland's current programs) designed a framework like a three-dimensional matrix with from three to ten elements on each side. Then a Maryland educator (previously employed by the SEA, and affiliated with a state university) applied the draft framework to an LEA program. This "pilot test" suggested revisions which were incorporated in the second draft framework (see Figure 1) used by RBS staff to describe a state program and an RBS program. The respective managers approved the program descriptions.

Task force members reviewed the framework. In order to accomodate individual "learning styles," three "handouts" were developed: 1) the sample program descriptions, 2) a diagramatic presentation of the framework, and 3) a linear listing of framework elements under dimension headings. (The same materials were shown to program managers interviewed for the comparative analysis.)

The framework was used in both organizations, but the methods differed. In RBS, the two task force members and the information officer interviewed program directors and their staff, wrote descriptions, and revised them in response to reviewers' comments. In Maryland, all SEA staff received a memo describing the project as a whole, and all SEA division directors were informed of the comparative analysis activities and invited to suggest programs for inclusion. Subsequently, program managers could use the framework to write their own descriptions.

Figure 1

Framework for Comparative Analysis
of Priority Programs



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RBS task force members analyzed the two sets of descriptions along the dimensions of the framework, and developed a concise table presenting relationships, particularly areas in which opportunities appeared to exist for mutual benefits. The joint management team (senior staff at RBS and MSDE) reviewed the preliminary analysis and program descriptions at a meeting in February. Recognizing each others' relative strengths and weaknesses, the team decided to drop one Maryland program and add another. The final list of program areas of mutual interest included: youth employability, social studies, guidance and counseling, basic skills, and Project Basic (with a focus on the role of facilitators). Although the list did not include special education, it was acknowledged that it was an area in which collaboration could occur.

Results

Results of the comparative analysis efforts can be categorized as: intended outcomes, unanticipated outcomes, and process learning.

Intended outcomes. The following had occurred as planned: ten program descriptions and an analytical chart had been developed; involvement had been voluntary; all professional staff of both organizations had been invited to participate; members of the joint management team had a working knowledge of each organization's priorities. Decisions had been made based on information provided. The activities had been cost-effective in terms of person time and outcomes.

Unanticipated outcomes. Just after program staff interviews began, RBS was asked to provide program descriptions for another, different interagency activity of major interest to two of the three staff developing the

descriptions. Thus, the product was used for two purposes, and the incentives were greater. A similar unanticipated result occurred just after the materials were developed: MSDE task force members decided to use the descriptions as "handouts" in meetings with professional associations and other key interest groups in the state. The implication appeared to be that if an activity or product could serve several purposes its value increased, and the individuals involved, "persuaded that collaboration is advantageous" (Rubin, 1980) demonstrated a "greater professionalism" (Aiken & Hage, 1968).

Process Learning. Although members of the task force understood the need to generate interest among program staff, in practice the task of developing program descriptions as a "first investment" provided no evidence of value of involvement. Of the ten descriptions used (five from each organization) only two were written by program managers. However, during the three-month period, some preliminary pilot work had begun, establishing the initial success suggested by Congreve (1969), so that in two areas program staff became advocates for collaborative involvement (Crandall, 1977). The most important process learning resulting from the comparative analysis efforts related to interdependence: if the work was to be truly collaborative, more attention needed to be given to equity and dependability. The barrier identified by Pasmore, et al., (1978) -- where imbalance results in "the more dependable party asking for greater rewards or offering less effort in task performance" -- needed to be overcome.

Pilot Activities

The project plan called for three to five pilot activities, each in a prority area of mutual interest, and each involving up to 10 contact days between RBS and Maryland educators. Pilot activities were supposed to be designed to increase mutual understanding of interests and capabilities, and to "accomplish work that each alone could not accomplish" (Rath & Hagans, 1978). Also, it was expected that areas would be selected based on the results of the comparative analysis, and, although initiated incrementally, all pilot efforts would be completed between January and the end of May. The following factors were also acknowledged:

- It was desirable for results (and/or the activities themselves) to be useful to district and school staff (in addition to MSDE).
- Areas selected should, if possible, include activities relating to research and evaluation, development, and dissemination.
- Staff of varying hierarchical levels from both organizations should be involved.
- Pilot activities should be coordinated by the two task force members, one from each organization, who had coordinated Regional Exchange efforts since mid 1978, and therefore had a good working relationship.

Activity Areas

Although many of the criteria set forth in the plan were satisfied, some were not. For instance, two of the five pilot activities were initiated in early December -- long before the comparative analysis was developed. Also, only one area was completed in May, and three continued to the end of the project year. In order to provide some content background, each of the five areas is briefly described.

Social studies. For 12 months, an RBS person served as a member of the state task force (SEA and LEA representatives) developing statewide goals and objectives in social studies.

Special education. For six months, an RBS person worked with a group of MSDE staff developing resource materials on program evaluation for schools and districts. Later, for four months, the same person worked with an interagency team (federal, state, local, school) coordinated by a community group, developing a streamlined process of identification and screening of special education students.

Basic skills. Six RBS staff conducted an insitute consisting of eight one-day workshops, during March and April, on "time-on-task" attended by four MSDE staff, five LEA staff, and a representative from a state university.

Youth employability. Three RBS staff worked with two MSDE staff and representatives from nine LEAs, between April and October, to: 1) determine opportunities and needs for cross-division coordination within MSDE, and 2) develop materials and methods for pre- and post-testing students in the youth employability program.

Study of the roles and functions of Project Basic facilitators. Three RBS staff worked with one MSDE staff person from March through November to design a study, develop measures, and analyze data on the facilitator role. (Project Basic is the statewide competency-based education program. MSDE provides assistance to the LEAs through on-site facilitators/linkers.)

Strategies

In November 1979, task force members engaged in a variety of strategic planning activities. One member developed a chart of barriers, facilitators, and strategies, applying the force field analysis technique in an attempt to anticipate problems (see Figure 2). The content was influenced heavily by recent literature on implementation such as the Rand study (Berman, et al., 1975-1977), Fullan and Pomfret (1977), and the synthesis on dissemination by Emrick and Peterson (1978). To a lesser extent, the chart was influenced by literature on coordination and collaboration, such as Trist's personal perspective (1978) and Aldrich's discussion of networking (1979).

As work got underway, two things quickly became apparent: 1) intra-organization coordination was crucial if inter-organization collaboration was to occur, and 2) individual motivation seemed to be the greatest force for or against success. Gradually, other factors also became apparent, and the facilitator of "knowledge of research on effective change" was stretched as staff tried to identify strategies to deal with the barriers.

Resources. Time and money were predicted problem areas, and the strategy of task restructuring was the most effective. In general terms this meant that staff involved in pilot activities needed either to shift responsibilities, or to make a task or product serve several purposes. (This had happened during comparative analysis activities when RBS staff used the results both for this project and for another.) Examples of restructuring included:

Figure 2

Examples of Barriers, Facilitators, and Strategies
(as perceived November 1979)

Barriers	Facilitators	Strategies
Resources		
- insufficient funds - other demands on time	- use of discretionary or other funds - capable, productive staff	- stimulate motivation other than "$ now" - restructure tasks
External/Internal Pressures		
- poor interagency intellegence - responsibility without authority - mid-stream changes: policy or personnel	- capable field staff - good cross-hierarchy relationships - high quality work	- use creative communication networks to influence key actors - keep several options open
Motivation/Support		
- preference for status quo - territorialism - "top down" imposition - lack of belief in the project	- need to grow and survive - trend toward "place and product" - knowledge of research on effective change - energy of advocates	- balance tensions - publicize successes of coordination - involve staff of all levels meaningfully - tap specific motivators

- Forming cross-division teams to tap expertise and build capacity (rather than "starting from scratch" within a division).

- Planning interagency work sessions so that each agency was well prepared to make the most of face-to-face meetings, often scheduling in such a way that one set of travel costs covered several work sessions.

- Changing accountabilities of some staff, for example, one manager temporarily let go some administrative duties and used her technical expertise, and another person delegated some staff development work to become involved in a research study.

- Trading tasks between agencies so that in each case the most skilled person did the work, finishing more quickly and therefore having additional "free" time. This was an important strategy in small overloaded work units with little slack in their resource base (Aiken & Hage, 1968).

Experiences of this project confirmed the Rand study finding (Berman et al., 1975) that it is not the amount of money that is important but how it is spent. Project funds were needed for direct expenses such as travel, workshop and printing costs, but to a much smaller extent than expected for person time. Once staff became involved in interagency pilot activities and found ways to make the work serve existing goals, they saw the activity not as an "add-on" but as a way of improving or enhancing regular work efforts.

External/Internal Pressures. Three barriers were predicted: 1) poor interagency intelligence, 2) responsibility without authority, and 3) mid-stream changes. It was hoped that the first would be overcome by the general design of the project which encouraged lateral communication and expanded the problem solving resources available to the organizations (Louis & Sieber, 1979; Pasmore et al., 1978). The second barrier related primarily to the task force members -- ministers without portfolio -- who

were directly responsible for day-to-day project activities but who had no official authority over staff involved. This is related to Rath and Hagans' (1978) argument that coordination is inhibited when those involved have insufficient authority to influence decisions and actions. The planned strategies to reduce this barrier were networking in the sense of boundary spanning, and real efforts to share control and responsibility. The possibility of mid-stream changes in policy or personnel could not be ignored, but also could not be controlled. The planned strategy was to keep options open by having a fairly flexible workscope. Each of these barriers is illustrated by examples in the following discussion.

Poor interagency intelligence was a problem in one area when the pilot tasks were determined by a division director and a program manager, and staff involved from one organization knew virtually nothing about the other organization nor about the Maryland Exploration Project. Also, the task was designed for staff of each agency to work alone and simple combine products at the last minute. The problem was resolved by lateral communication through the informal network. A staff person negotiated with the director to redefine the pilot task, and then set up an interagency meeting which not only increased participants' understanding of each agency's interest and capabilities, but also helped coordinate efforts within that division.

The issue of responsibility without authority was less evident between agencies than within an agency. That is, outside the parent agency a person assumed a cloak of the organization's status covering his or her individual rank and allowing cross-hierarchical interaction in the other

agency. However, within the parent agency, a person's rank for regular duties was known and did not provide authority across divisions or units. One problem occurred when a task force member tried to persuade a program manager (in a different division and one level higher in the organizational structure) to initiate a pilot activity. Although the task force member had the approval of the division director, the program manager exercised his right not to volunteer. Of the five sources of power -- physical, resource, position, expert, and personal (Handy, 1978) -- only the last two were available to the task force member, who then chose to influence by persuasion, hoping the manager would become committed to the specific, challenging but attainable targets suggested. Over a period of six weeks the task force member shared information with the manager in a variety of ways (e.g., the monthly project "fact sheet" which publicized successes of other pilot activities, conversations "over the coffee pot," etc,), trying to make it clear that involvement would mean shared responsibility without loss of control. The manager initiated pilot activity, took ownership of it, and subsequently kept the task force informed of his progress.

One mid-stream change that occurred was the resignation of a person who had initiated one of the pilot activities and contributed a great deal to building good interagency relations. His position was not filled. However, he had involved LEA staff in the pilot activity, and so the work continued as LEA staff shared his responsibilities between them. Here, instead of a single line, a bundle or network of lines was used to reinforce interagency communication.

Motivation/Support. Four barriers were predicted: 1) preference for the status quo, 2) territorialism, 3) "top down" imposition, and 4) lack of belief in the project. Although all four were apparent, the fourth was the most serious. Work to minimize these barriers continued throughout the project: there was no simple one-time solution strategy. Strategies included: 1) balancing the tensions of survival and growth; 2) establishing early successes (Congreve, 1969) and publicizing them (Rubin, 1980); 3) involving staff of all levels meaningfully; and 4) identifying and tapping specific motivators. One important "facilitator" was a trend in both organizations not only to follow the traditional structure of control by content or product area, but also to explore matrix management across content areas. (For instance, MSDE "matrixed" by looking at service delivery to the 24 LEAs, and RBS "matrixed" by looking at work in the four states at SEA, LEA, and school levels.) Both efforts had been initated before and separate from the project with strong senior management support. The exploratory efforts in matrix management helped prepare staff of both organizations for the new ideas and activities of the project. Each of these barriers is illustrated by examples in the following discussion.

Preference for the status quo was apparent in the behavior of several individuals. The most successful strategy appeared to be teaming, so that the security and survival instincts of those who wanted to maintain the status quo were balanced by the energy of the innovative risk-takers looking for growth opportunities. In some cases teams of two or three persons worked together throughout the pilot activity. In other cases,

a task force member would energize a pilot activity by participating in an interagency work session, or providing encouragement and reinforcement during debriefing sessions in the parent agency.

Territorialism was not as great a problem as originally anticipated, possibly because responsibility really was shared and no one lost any control. In the beginning however, there were fears of loss of organizatonal autonomy and program visibility (Kelty, 1976). Two strategies were helpful. First, within the parent organization involvement in the project was rewarded by legitimizing the pilot activities, giving efforts equal status with other work, discussing work under way at division meetings, assurance -- by senior management -- that staff would not be "punished" for time spent on interagency collaboration. Also, between organizations, ways had to be found to publicize successes so that each agency was credited appropriately. It was found that conflict was less likely when it was understood that usually each agency wanted different kinds of visibility with different audiences. For instance, in one case RBS staff were interested in research implications and MSDE was interested in local implementation of the results of a pilot activity. A slip, as when one agency claimed total credit for a joint effort, created distrust and renewed territorialism, and strategies to reduce the barriers had to be used again.

"Top down" imposition was anticipated, but the project design allowed for involvement by staff of all levels in planning, decision-making, pilot activity development and implementation, so there were no real problems in this area.

Lack of belief in the project was a barrier in the beginning, which gradually decreased, then reappeared at intervals. Disbelief was evidenced in various ways, for example: 1) staff doubted that senior management would allow them much opportunity to influence decisions; 2) program managers doubted that pilot activities would have primary benefits; 3) individuals at all levels perceived the project as paper-and-pencil planning and compliance, "peripheral...a short-term tactical matter without meaning," (Trist, 1978); and 4) federal reorganization and changes in political leadership raised questions about the likelihood of the project's long-term success. Doubts about staff influence, primary benefits, and meaningful involvement were resolved gradually by demonstration and participation in the project. The impact of federal reorganization was beyond RBS/MSDF control. Overall, the question to be anticipated was, "What's in it for me?" which was sometimes answered organizationally (e.g., "...opportunity for the division to use an existing knowledge base in a new way which could be transferred to other settings") and sometimes answered individually (e.g., "...to demonstrate a skill your supervisor currently does not know you have"). This strategy of tapping specific motivation required accurate understanding of organizational and individual capabilities and interests by task force members and also by program managers. When individual motivation was tapped effectively, problems of equity (mentioned in the earlier discussion of comparative analysis activities) were reduced: the person was unconcerned that he or she might be more productive than the counterpart in the other agency, because the rewards (outside the collaborative action set) were high and important to that person.

Results

Results of the pilot activities were influenced by the comparative analysis experience, and can be categorized as: intended outcomes, anticipated outcomes, and process learnings.

Intended Outcomes. The hoped for outcomes of pilot activities included: 1) development of good working relationships between staff of the two organizations; 2) clear understanding by each organization of the other's interests and capabilities; and 3) accomplishment of a specific task related to school improvement. Together, results would influence decisions guiding long-term planning.

Those long-term planning decisions were made at the end of June: all five pilot areas were approved by the joint management team for inclusion in the long-term plan.

By the end of the project year, good working relationships had been developed between RBS and MSDE staff, and in some areas with other groups of Maryland educators. (Figure 3 summarizes interorganization contacts for the pilot areas.) There was a clear understanding of mutual interests and capabilities. Specific accomplishments -- as of December 1, 1980 -- resulting from collaborative pilot activities included:

- Social studies -- statewide goals, objectives, and a scope-and-sequence had been approved by MSDE and LEA representatives, and four LEAs had been selected to pilot test the program framework.
- Special education -- resource materials on program evaluation had been developed, and a streamlined process for screening students for special education had been pilot tested at one site.
- Basic skills -- MSDE and LEA staff and faculty of one university had a clear understanding of "time-on-task" research and how it could be applied by teachers.

Figure 3

Maryland/RBS Pilot Activities
RBS Involvement with Maryland Educators

Topic	RBS Staff	Number of Direct Contacts (individuals)				Number of Indirect Contacts (SEA divisions and local systems)			
		SEA	LEA	School	Other	SEA	LEAs	Schools	Other
Special Education	1	4	5	10	2*	1	24	1	
Social Studies	1	2	12			1	24		
Basic Skills	6	4	6		2**	2	1		1**
Youth Employability	4	2				4	9		
Facilitator Study	3	2							
Conferences									
Synthesis: Citizen Ed.	2	1				1	24		
Oral & Written Communication	4	1	2	1		2	3	1	
Basic Skills	3	1				1			
School Effectiveness	6	7	1			4	24		1***
Minorities & Women	3	1				1			

Each RBS staff person is only counted once (for the primary area of involvement)

Direct Contacts = individuals with whom RBS staff worked directly on more than one occasion.

Indirect Contacts = districts, schools, or other agencies known to have received products or services as a direct result of pilot activity.

* In special education, other direct contacts were Baltimore Blueprint staff.

** In basic skills, other direct contacts were staff of the Baltimore City Teacher Center and Towson State University; the latter was also an indirect contact.

*** For the school effectiveness conference the other contact was the University of Maryland.

- Youth employability -- the MSDE program manager had data to guide policy on SEA coordination, and nine LEAs were using the pre-post measure to determine student achievement.
- Project Basic facilitator study -- the MSDE program manager and role incumbents had data to guide planning for improvement of the facilitator role.

Unintended Outcomes

Several unanticipated barriers to success were raised during the pilot activities. In some cases immediate negative results were gradually alleviated; in other cases their influence persisted. Also, the use of strategies to overcome specific barriers had rippling affects through the organizational system bringing about other unintended outcomes. Overall, unintended outcomes of pilot activities fall into three categories: 1) timelines, 2) staff relationships, and 3) quality of work.

Timelines were extended for three reasons: 1) accidents, 2) other tasks, and 3) success. For example, in one pilot area a key action set member was involved in two traffic accidents, causing a three-week delay. In other areas, action set members were assigned other tasks so that the collaborative work was temporarily set aside. Success of a collaborative effort also extended timelines as action set members or division directors found ways to capitalize on the initial task.

Staff relationships within each organization changed because of: 1) task restructuring, 2) time allocations, and 3) new communication patterns. More cross-division interaction occurred, and was considered legitimate (sometimes formalizing informal networks or including new members in networks). Since action set members were program managers or line staff

and since they gathered external information in interagency interactions, upward communication flow became more important and new patterns and mechanisms were established. As tasks were restructured and time allocations changed, roles and responsibilities had to be renegotiated -- both for those directly involved in project activities and for others "taking up the slack." Renegotiation, information sharing and task coordination all required more time spent on communication, leading to increased understanding between staff both laterally and hierarchically.

Quality of work was affected by: 1) affective dissonance, 2) cross-fertilization of expertise, and 3) sense of ownership -- the first factor having a negative impact, and the other two factors being positive. Affective dissonance occurred sporadically and had no serious long-term impact but did cause short-term setbacks. Problems occurred within action sets when members of one organization tried to dominate members of the other organization -- usually by using specific expertise as a weapon rather than a resource in problem-solving. In contrast, when cross-fertilization of expertise occurred within an action set, individual and group morale increased and tasks were accomplished well and quickly. In some action sets both affective dissonance and cross-fertilization of expertise occurred. In almost all cases once work was underway all members of an action set had a stake in the consequences and this sense of ownership was an incentive to improve the quality of work.

Process Learning. The greatest learning was the slow and difficult task of understanding collaboration -- which is different from coordination or cooperation. The theoretical differences were understood, e.g.,

> A cooperative practitioner is an interested and receptive volunteer, whose motivation to cooperate is activated and channeled by the change agent (Sieber, 1972). A collaborative practitioner is an equal partner with the change agent. (Roberts, 1978, p. 21)

The learning occurred as members of both organizations struggled to maintain equal partnerships. In practice, relationships were not constant. Within each action set, control/leadership shifted as tasks evolved and needs changed. A collaborative relationship was developed over time when action set members perceived overall interdependence and equality. Two kinds of tasks did not lead to collaboration: teaching/learning situations, and product development. That is, when the interagency activity required one group to train the other in a traditional workshop setting, cooperation was apparent, rather than collaboration. Also when the focus of activity was product development with one group producing and the other reviewing or using, task coordination was apparent, rather than collaboration. Effective collaboration required frequent in-person contact, diplomacy, a positive attitude toward other members of the action set, thoughtful use of available expertise, and careful reality-testing to understand each organization's operating constraints.

Another learning was drawn from analysis of the relationship of barriers and strategies. It appeared that barriers were not overcome by strategies of the same kind. For instance, in terms of resources, the barrier of insufficient funds was not overcome by use of discretionary funds, but by designing double-win situations. Successful strategies were interactive -- tapping individual motivation, using systemic opportunities, and taking into account political realities.

Finally, there was some indication that although the assumption that "shared resources equals greater impact" may be an outcome of collaboration or coordination, it was not necessarily the stimulus for participation in collaborative activity.

Long-Term Planning

Long-term planning resulted in a product -- a proposal submitted to the National Institute of Education requesting funds for activities which would make Maryland a full member of the region served by RBS. Planning activities also led to a variety of other results, especially as the impact of changes at the federal level were experienced. Activities are described here in terms of early decisions, development, and results.

Early Decisions

The original schedule required submission of a draft plan to NIE in late September. However, in early June NIE requested the plan by mid August. Therefore, at a joint management team meeting June 23, decisions were made as to work areas to be included and general levels of effort and timelines. Also, planning procedures and schedules were determined. Decisions were influenced by results of pilot activities, organizational priorities, and state and federal policy guidelines.

Although the joint management team determined work areas, specific workscopes were to be determined by pilot activity action set members. Task force members of both organizations were to coordinate planning efforts, division directors were to approve specific parts of the plan, and representatives of the joint management team were to approve the overall plan. It

was anticipated that with so many people involved, development, review and revision would be time consuming and it would be difficult to meet the mid August deadline.

Development

Action set members developed long-term plans while continuing pilot activities and carrying out regular roles and responsibilities. The barriers discussed earlier continued to exist in varying degrees, with "insufficient time" operating to increase stress, complicated by the fact that staff of both organizations took vacations.

The dilemma of time vs participation was recognized by task force members who took responsibility for three decisions: 1) for each work area a dyad of one representative from each organization would design the plan (other action set members could participate only through the designated representatives); 2) since RBS staff were familiar with NIE requirements they would write the draft plan; and 3) one task force member in each organization would coordinate and supervise production and review tasks. These decisions reduced participation to some extent, requiring less discussion time. Although the dyads of planners were worried about the amount of work to be done in the time available, there were no complaints about lack of opportunity to influence decisions.

The development, review, approval, revision, and production process went very smoothly, although the proposal did not reach NIE until the beginning of September.

However, a series of problems occurred in decision-making over the work areas grouped under the Regional Exchange (Rx). Three forces

influenced decisions: 1) four work areas to be included at MSDE request were in addition to pilot activity areas; 2) the on-going Rx proposal (with a fairly certain funding level) was being written at the same time; and 3) trends in federal activity indicated possible changes in funding priorities. The issues to be resolved included: 1) which work areas should be included in which proposal for what level of effort? 2) what were the risks and consequences of alternative decisions? 3) how could a balance be maintained between the interests of MSDE, RBS, and NIE (which differed in some instances) and cost-effective use of resources? The most influential criteria applied in making decisions related to long-term consequences: potential widespread impact on school improvement and following through on the interdependent working relationships of action sets. That is, a work area was included in both proposals if it had high potential impact and if RBS involvement was important for successful completion of the work. (Each proposal described separate specific tasks for each work area.) The two exceptions were: special education, and general curriculum, which were not included in the Rx proposal.

Results

Results of long-term planning activities were influenced by participants' experience of pilot efforts and by strong external forces. Results can be categorized as: intended outcomes, unintended outcomes, and process learnings.

Intended Outcomes. As planned, a proposal was developed by the collaborative efforts of staff of both organizations. As hoped, work of common interest related to dissemination, development, and research and

evaluation. Figure 4, Involvement and Relationships of Pilot and Proposed Long-Term Activities, summarizes the proposed activities, their relationship to pilot activities, the organizational divisions and units involved, and the proposed level of effort (expressed as full time equivalents). All five pilot areas led to long-term activities. All of RBS' four divisions and all MSDE instruction-oriented divisions were involved in planning and would be involved in long-term activities. All LEAs would be involved in some long-term activities. Staff of all levels in both RBS and MSDE were actively involved in decision-making.

Unintended Outcomes. Following review of the project proposal by NIE staff and external reviewers, revisions were discussed. However, in early November NIE announced that federal appropriations would not allow funding of the proposal. Therefore, no revisions were made to the written long-term plan.

In spite of NIE decisions, RBS and MSDE took steps to preserve the gains made during the project. Using the criteria of potential impact and importance of interdependent contributions, task force members and division directors re-examined priorities and specific tasks within work areas. Areas ranked most important by senior management were further clarified. By the end of February 1981, RBS Regional Exchange, MSDE, and Baltimore Blueprint funds were being used to support work in eight areas, including all five of the project pilot activity areas. Although the level of effort was considerably less than it would have been if the project proposal had been funded, the most critical tasks were covered and staff of both organizations could see their pilot efforts had not been in vain.

Figure 4

Involvement and Relationships of Pilot and Proposed Long-term Activities

Pilot Areas	Proposed Activities	RBS Division/Units*	MSDE Divisions*	Other Maryland Agencies	Level of Effort
	Continue liaison, coordinating activity and documentation	Regional Exchange	Office of Developmental Projects		.15
Social Studies	Develop resource collection and review state documents	Development: urban education	Instruction	All LEAs plus 4 sites	.20
Special Education	Refine screening model and assist with implementation for all Baltimore schools	Special Projects: special ed.	Special Education	Baltimore Blueprint 1 LEA	.40
Basic Skills	Conduct a state conference, follow up in-depth training, and provide on-site implementation assistance	Development: basic skills	Office of Developmental Projects	20 LEAs plus 4-6 sites	.25
None	Assist with training in basic skills coordination and secondary school improvement	Regional Exchange	Instruction	Diffused impact -- all LEAs	.25
None	Conduct task analysis and redesign role of guidance counselors statewide	Regional Exchange	Compensatory, Urban, Supplemental Programs	Diffused impact -- all LEAs	.15
None	Provide general curriculum information assistance	Regional Exchange	Instruction	Diffused impact	.30
None	Develop syntheses on state priorities for distribution via Project LIFE (Library Information Functional Exchange)	Regional Exchange	Library/Media Services	All LEAs	.05
					Total 1.75
Youth Employability	Develop descriptive analyses of LEA implementation; develop and assist in implementing model components of project	Development: career preparation	Instruction	9 LEAs	1.80
Facilitator Study	Conduct study of delivery of training and technical assistance by MSDE to LEAs	Research & Evaluation: Field studies	Office of Developmental Projects and Project Basic Instruction Special Ed. Library/Media C.U.S.P. Vo-Tech. Ed.	Sample LEA sites	1.35
None	Involve Maryland in regional needs assessment to allow input in the same way as other states in RBS' region	Research & Evaluation: Regional needs assessment	Office of Developmental Projects	All LEAs (diffused)	.55

* The Division with primary responsibility for a set of activities is underlined.

Process Learning. Two important lessons were learned during long-term planning activities: 1) staff commitment overcame several barriers, and 2) external forces created barriers that could not be overcome.

The impact of staff commitment was apparent in the resiliance of action sets as they coped with many tasks and the earlier deadline for a proposal at a "season" which rarely requires high productivity. The strategy of participatory planning produced the "bundle of sticks" which had great strength in that tasks could be shared easily since staff had built a considerable shared knowledge base. Also, energy and support could be maintained without too much threat of individual burnout.

The impact of external forces could not have been controlled. It is possible that NIE decisions could have been influenced to some extent if some energy had been directed outward, but it was not possible for RBS and MSDE to predict or influence the results of national elections such as educational program reductions.

The combined learning suggested that the amount of investment by staff involved carry some project efforts through set backs caused by external forces, but the nature of staff investment was not appropriate to overcome decisions by external agencies.

Summary and Discussion

Staff of all hierarchical levels of two organizations were involved in three areas of activity:

- Comparative analysis of priorities and interests which used face-to-face interviews to familiarize staff with the project and to collect data for a set of materials describing work of both organizations on a common framework.

- Pilot activities in social studies, special education, basic skills, youth employability, and a study of Project Basic facilitators, each of which involved interorganization action sets in collaborative work related to school improvement.

- Long-term planning building on the pilot activities, and including a written proposal (developed by interorganization teams) requesting federal funds to support further work.

These three areas of activity were related to others (governance, project monitoring, and NIE interaction) which together made up the Maryland Exploration Project.

Certain perspectives influenced all project activities. For instance, Trist (1978) argues that if interagency collaborative work efforts are to be effective two processes are essential: work restructuring, and "a planning process that is interactive and participatory." Such a process is referred to as "continuous adaptive planning" by Ackoff (1974); Miles (1976) argues that strategies of planning and implementation should be integrated; a review of the literature indicates that facilitating strategies include optimal use of resources, shared leadership, mobilization of support (at all hierarchical levels), use of reciprocal feedback, and a problem-solving or client-centered approach (e.g., Berman et al., 1977, Moore et al., 1977, Kirst, 1977).

With perspectives such as these, many activities were comparatively innovative. For instance, since the final "product" of the project was a long-term plan, tradition suggested information exchange, needs assessment, and development of a plan by one or two individuals. However, in the hope that plans developed would, in fact, be implemented, project activities were designed not only to result in a product called a plan, but also in less tangible outcomes such as commitment to active working

partnerships between individuals and organizations and "willingness to align one's own purposes with those of others" (Trist, 1978). To these ends, the joint task force (two RBS staff and three MSDE staff) shared project responsibilities, and involved many individuals and groups in a variety of activities, including decision-making and planning.

All efforts were directed to the overall goal of enhancing or creating collaborative working relationships between RBS and Maryland educators in order to influence school improvement. Continuous use of multi-directional communication allowed for planning and implementation to be interactive and flexible, as priority programs were analyzed, pilot activities initiated, and long-term plans developed.

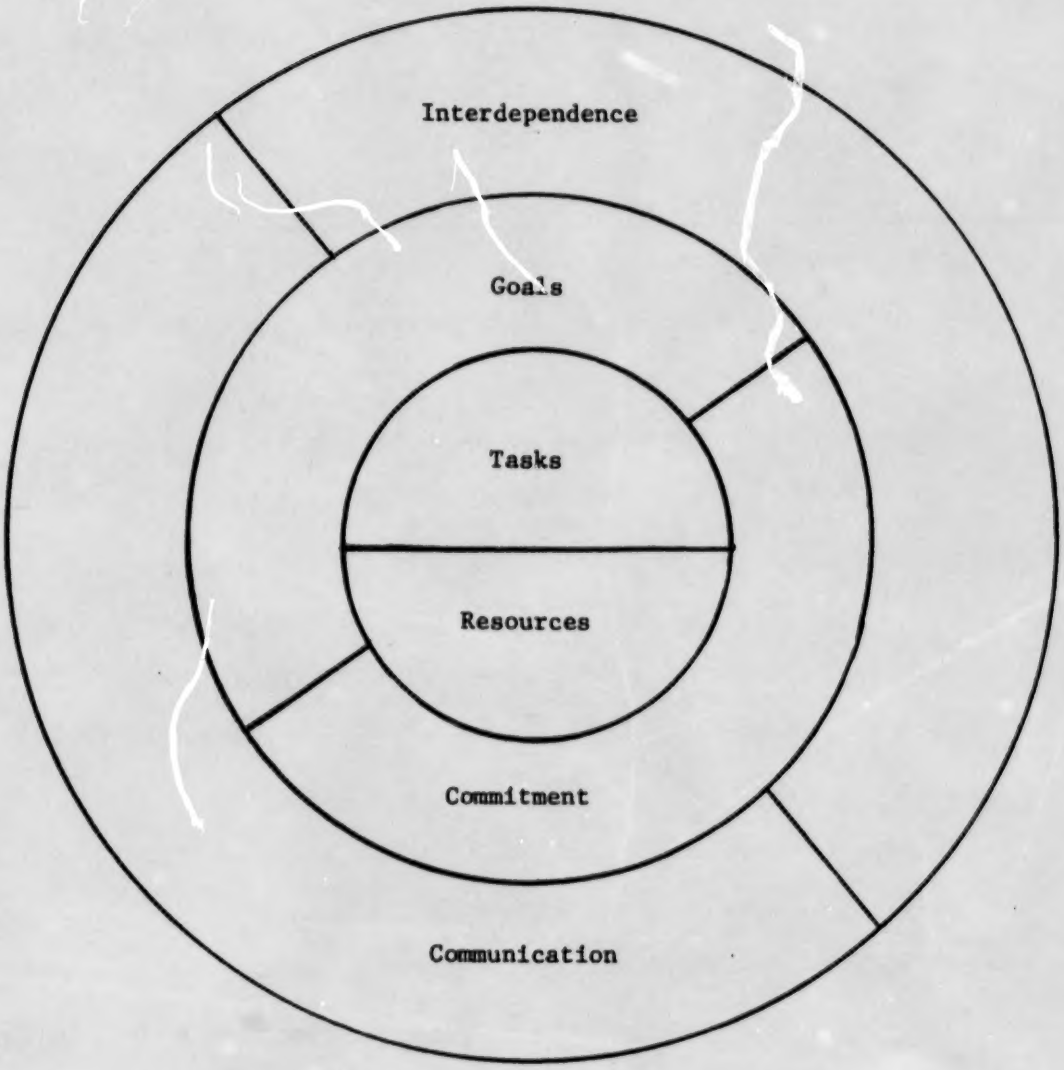
In interagency collaboration (for which intraorganization coordination is extremely important) there appears to be six dimensions that are interactive, which are present throughout all phases of activity, and which evolve slowly as work progresses:

- Tasks and resources are almost "givens," representing constraints and opportunities.
- Goals and commitment are generated as work gets underway.
- Interdependence and multi-directional communication are dimensions unique to collaboration.

The preliminary model (Figure 5) suggested by these dimensions is like three "lazy susans" with a variety of interactions possible. The center -- tasks and resources -- is the immediate operational concern of action set members. The second circle -- goals and commitment -- is influenced equally by the center and by the outer circle: goals can only be attained by

Figure 5

Coordination and Collaboration:
Preliminary Model



effective use of resources to accomplish specific tasks, and (in a collaborative project) attainment of goals and commitment also requires the equity and dependability of interdependence, and mechanisms and patterns of hierarchical and lateral communication. The outer circle -- interdependence and communication -- not only influences goals and commitment, but is also influenced by those dimensions. Only when goals and commitment allow for individual and organizational successes (rewards perceived to be directly related to contributions) is interdependence likely to flourish. Also, the nature and sincerity of the goals and commitment must allow for multi-directional communication to take place.

Time and impact are related to the model. Attention focused on the center can have quick results, which may have relatively little impact. By contrast, development of interdependence and multi-directional communication is a slow process but can have high long-lasting impact. The complexity and level of knowledge, skills, and attitudes needed to put the model into practice increase as attention moves from the center to the outer circle.

This preliminary model attempts to define the dimensions of collaborative activities between an educational R&D laboratory and a state educational agency. It is hoped that it may also be useful in other human service areas. Although the present industrial society is built on competition and continued growth, it is possible that the future post-industrial social order may require, instead, coordination and collaboration.

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